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PTO/SB/21 (04-04)

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**TRANSMITTAL
FORM**

(to be used for all correspondence after initial filing)

TRANSMITTAL FORM (to be used for all correspondence after initial filing)	Application Number	09/788,002
	Filing Date	February 16, 2001
	First Named Inventor	Leo Driessen
	Art Unit	3721
	Examiner Name	Louis B. Tran
Total Number of Pages in This Submission	Attorney Docket Number	CS1089#SP (HDP 0275S-000670)

ENCLOSURES (check all that apply)

<input checked="" type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment / Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Response to Missing Parts/ Incomplete Application <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____	<input type="checkbox"/> After Allowance Communication to Technology Center (TC) <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input checked="" type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below) Return postcard
Remarks		

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm or Individual name	Harness, Dickey & Pierce, P.L.C.	Attorney Name Michael D. Zalobsky	Reg. No. 45,512
Signature			
Date	July 30, 2004		

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Signature		Date	July 30, 2004

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PTO/SB/17 (10-03)

Approved for use through 07/31/2006. OMB 0651-0032

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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FEE TRANSMITTAL for FY 2004

Effective 10/01/2003. Patent fees are subject to annual revision.

☐ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$ 330

Complete If Known

Application Number 09/788,002
 Filing Date February 16, 2001
 First Named Inventor Leo Driessen
 Examiner Name Louis B. Tran
 Art Unit 3721
 Attorney Docket No. CS10895P (02755-000670)

METHOD OF PAYMENT (check all that apply)

☐ Check ☐ Credit card ☐ Money Order ☐ Other ☐ None
☒ Deposit Account:
 Deposit
 Account
 Number

02-2548

 Deposit
 Account
 Name

Black & Decker (U.S.) Inc.

The Director is authorized to: (check all that apply)

☒ Charge fee(s) indicated below ☒ Credit any overpayments
☒ Charge any additional fee(s) during the pendency of this application
☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.

FEE CALCULATION

1. BASIC FILING FEE

Large Entity	Small Entity	Fee Code	Fee (\$)	Fee Description	Fee Paid
1001	770	2001	385	Utility filing fee	
1002	340	2002	170	Design filing fee	
1003	530	2003	265	Plant filing fee	
1004	770	2004	385	Reissue filing fee	
1005	160	2005	80	Provisional filing fee	

SUBTOTAL (1)

(\$ 0

2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

Total Claims	Extra Claims	Fee from below	Fee Paid
-20 **	= 0	X	= 0
Independent Claims	-3 **	= 0	X
Multiple Dependent	X	= 0	

Large Entity	Small Entity	Fee Code	Fee (\$)	Fee Description
1201	86	2201	43	Claims in excess of 20
1203	290	2203	145	Multiple dependent claim, in excess of 3
1204	86	2204	43	** Reissue independent claims over original patent
1205	18	2205	9	** Reissue claims in excess of 20 and over original patent

SUBTOTAL (2)

(\$ 0

3. ADDITIONAL FEES

Large Entity Small Entity

Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Description	Fee Paid
1051	130	2051	65	Surcharge - late filing fee or oath	
1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet	
1053	130	1053	130	Non-English specification	
1812	2,520	1812	2,520	For filing a request for reexamination	
1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action	
1805	1,840*	1805	1,840*	Requesting publication of SIR after Examiner action	
1251	110	2251	55	Extension for reply within first month	
1252	420	2252	210	Extension for reply within second month	
1253	950	2253	475	Extension for reply within third month	
1254	1,480	2254	740	Extension for reply within fourth month	
1255	2,010	2255	1,005	Extension for reply within fifth month	
1401	330	2401	165	Notice of Appeal	
1402	330	2402	165	Filing a brief in support of an appeal	330
1403	290	2403	145	Request for oral hearing	
1451	1,510	1451	1,510	Petition to institute a public use proceeding	
1452	110	2452	55	Petition to revive - unavoidable	
1453	1,330	2453	665	Petition to revive - unintentional	
1501	1,330	2501	665	Utility issue fee (or reissue)	
1502	480	2502	240	Design issue fee	
1503	640	2503	320	Plant issue fee	
1460	130	1460	130	Petitions to the Commissioner	
1807	50	1807	50	Processing fee under 37 CFR 1.17 (a)	
1806	180	1806	180	Submission of Information Disclosure Sheet	
8021	40	8021	40	Recording each patent assignment per property (times number of properties)	
1809	770	2809	385	Filing a submission after final rejection (37 CFR § 1.129(a))	
1810	770	2810	385	For each additional invention to be examined (37 CFR § 1.129(b))	
1801	770	2801	385	Request for Continued Examination (RCE)	
1802	900	1802	900	Request for extended examination of a design application	

Other fee (specify) _____

*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$ 330

**or number previously paid, if greater; For Reissues, see above

SUBMITTED BY

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Telephone

248-641-1600

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Date

July 30, 2004

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PATENT
IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.: 09/788,002
Filing Date: February 16, 2001
Applicant: Leo Driessen
Group Art Unit: 3721
Examiner: Louis B. Tran
Title: POWER TOOL
Attorney Docket: CS1089#SP (HD&P 0275S-000670)

Mail Stop Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

APPEAL BRIEF

Sir:

This is an appeal brief in support of an appeal from the March 5, 2004 final rejection of Claims 1 through 4, 6, 8 through 16, 18 and 19.

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REAL PARTY IN INTEREST

Black & Decker Inc., being the assignee of the present application, is the real party in interest.

RELATED APPEALS & INTERFERENCES

To the best of Appellant's knowledge, no other appeals or interferences are pending which will directly affect or be directly affected by or have a bearing on the Board's decision in the present pending appeal.

STATUS OF THE CLAIMS

On June 4, 2004, Appellant appealed from the final rejection of Claims 1 through 4, 6, 8 through 16, 18 and 19. Claims 5, 7, and 17 have been canceled.

A copy of the claims at issue is provided in attached Appendix A.

A copy of the Office Action mailed March 5, 2004 placing the present application under final rejection is provided in attached Appendix B.

A copy of U.S. Patent No. 4,905,423 to Van Laere is provided in attached Appendix C.

A copy of U.S. Patent No. 4,274,304 to Curtiss is provided in attached Appendix D.

A copy of U.S. Patent No. 4,103,511 to Kress et al. is provided in attached Appendix E.

STATUS OF AMENDMENTS

No amendment to the claims has been filed or is pending subsequent to the entry of the final rejection.

SUMMARY OF THE INVENTION

The invention relates to a power tool having a tool body and a plurality of different tool heads that may be selectively coupled to the tool body by means of a locking mechanism so that the tool heads may be selectively coupled to and uncoupled from the tool body.

With reference to Figures 1 and 5a, the power tool includes a tool body (12) having a housing that is defined by a pair of clam shells (14, 16). The housing defines a front facing recess (52) in which an input gear (50) is disposed. The input gear (50) is driven by the output spindle of a gear reduction mechanism.

With reference to Figure 5b, the tool body includes a release button (208) that is movably mounted in the housing. With additional reference to Figures 7b and 7c, the release button (208) includes a pair of cams (212) that engage the shoulders (230) of a spring (200). The spring (200) biases the release button (208) in a direction that is outwardly of the housing.

With reference to Figures 8 and 8a, the power tool further includes a tool head (40) having a spigot (96) that includes grooves or recesses (239) and a lead-in cam (250).

When a tool head is to be coupled to the tool body, the spigot (96) is placed in the recess (52) and urged along the axis (51). Contact between the arms (201) (Fig. 7c) of the spring (200) and the lead-in cam (250) urges the arms (201) outwardly of the spigot (96) to permit the arms (201) to ride over the lead-in cam (250) and drop into the recesses (239) in the spigot (96), thereby coupling the tool head and the tool body.

When a tool head is to be uncoupled from the tool body, the release button (208) is depressed so that contact between the cams (212) and the shoulders (230) forces the arms (201) of the spring (200) outwardly to a degree where the spigot (96) may be withdrawn from the recess (52).

ISSUES

Appellant presents the following issue for review:

Whether or not Claims 1 through 4, 6, 8 through 16, 18 and 19 are unpatentable under 35 U.S.C. §112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which the applicant regards as the invention.

Whether or not Claims 1 through 4 and 8 through 16 are unpatentable under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 4,905,423 to Van Laere.

Whether or not Claims 18 and 19 are unpatentable under 35 U.S.C. §103(a) as being obvious over U.S. Patent No. 4,905,423 to Van Laere in view of

U.S. Patent No. 4,274,304 to Curtiss and further in view of Applicant's admitted prior art.

Whether or not Claim 6 is unpatentable under 35 U.S.C. §103(a) as being obvious over U.S. Patent No. 4,905,423 to Van Laere in view of U.S. Patent No. 4,103,511 to Kress et al.

GROUPING OF THE CLAIMS

Concerning the rejections under 35 U.S.C. §112, second paragraph, Claims 1 through 4, 6, 8 through 10 and 18 stand or fall together and Claims 11 through 16 and 19 stand or fall together. The reasons why Appellant believes the two groups of claims to be separately patentable are explained below in the Arguments.

Concerning the rejections under 35 U.S.C. §§102(b) and 103(a), Claims 1 through 4, 6, 8 through 16, 18 and 19 stand or fall together.

ARGUMENTS

Rejections Based On 35 U.S.C. §112, Second Paragraph

Applicant notes that the Examiner has stated in the above-referenced final rejection (copy attached in Appendix B) that:

Claim 1 requires a "tool-less means" by which the operator may couple the attachment. It is unclear what is encompassed by tool-less and what the scope of the claim is.

Claim 11 recites the limitation "the other one" in line 14 of the claim. There is insufficient antecedent basis for this limitation in the claim. It is unclear what is being referred to.

With regard to the former ground of rejection, Applicant notes that Claim 1 recites:

...
a lock having a first portion that is associated with the body and a second portion that is associated with the attachment, the lock being operable in a locked condition, wherein the first and second portions are engaged to one another to thereby secure the body and the attachment together, the lock being further operable in an unlocked condition, wherein the first and second portions are disengaged from one another to permit the attachment to be removed from the body;

...
wherein the lock provides an operator of the power tool with a tool-less means by which the operator may couple the attachment to the body.

Applicant notes that one general thrust of the above-referenced patent application is the capability for an operator of a power tool constructed in accordance with the teachings of the present invention to selectively couple and uncouple tool heads from a tool body without resort to some sort of tool, such as a wrench or screwdriver. Applicant respectfully submits that this meaning is clearly understood from the phrase "a tool-less means by which the operator of the power tool may couple the attachment to the body". Applicant also submits that this phrase does not invoke 35 U.S.C. §112, sixth paragraph, but rather is functional language that provides an additional description of the function of the lock.

In view of the above remarks, Applicant submits that the Examiner has not presented a *prima facie* case of indefiniteness as the Examiner has not established that one of ordinary skill in the pertinent art, when reading the claim in light of the supporting specification, would not have been able to ascertain with a reasonable degree of precision and particularity the specific area set out and circumscribed by the claim. *Panduit Corp. v. Dennison Mfg. Co.*, 810 F.2d 1561, 1 USPQ2d 1593 (Fed. Cir.), *cert. denied*, 481 U.S. 1052 (1987). Accordingly,

Applicant submits that the rejection of Claims 1 through 4, 6, 8 through 10 and 18 under 35 U.S.C. §112, second paragraph cannot stand.

With regard to the latter ground of rejection, Applicant notes that Claim 11 recites:

a lock for releasably coupling the body and the attachment, the lock including a first lock portion that is permanently carried by one of the body and the attachment, the lock further including a second lock portion that is permanently associated with the other one of the body and the attachment, the second lock portion being configured to engage the first lock portion in response to a manual input applied from a hand of an operator of the power tool, the manual input being applied directly to the lock. (emphasis added)

As noted above, the Examiner has based the rejection of Claim 11 under 35 U.S.C. §112, second paragraph on that claim's recitation of "the other one of the body and the attachment" and a lack of antecedent basis for this limitation in the claim. In essence, it appears that the Examiner contends that the word "the" prior to "other one of the body and the attachment" is improper.

Applicant notes that a rejection for lack of antecedent basis is properly entered only where the claim language generates confusion with other parts of the claim. Applicant submits that there is no confusion and as such, the Examiner has not presented a *prima facie* case of indefiniteness.

In this regard, Applicant notes that the first lock portion is coupled to one of the body and the attachment (i.e., to either the body or the attachment) and that this coupling "sets" or fixes the terms "the one of the body and the attachment" and "the other one of the body and the attachment". Since there are only two possibilities (i.e., the body or the attachment), the selection of one of the body and the attachment (for coupling to the first lock portion) leaves only one other possibility. Consequently, the phrase "the other one of the body and the

attachment" cannot be indefinite since the earlier selection of "the one..." sets or fixes which of the two choices becomes "the other one...". Stated another way, when there are only two possibilities from which to select and one of the two is selected (and we know which of the two was selected), we inherently know which of the two possibilities remains. Because we inherently know which of the two possibilities remains, the use of the phrase "the other one..." is not confusing or ambiguous.

In view of the above remarks, Applicant submits that the Examiner has not presented a *prima facie* case of indefiniteness and respectfully submits that the rejection of Claims 11 through 16 and 19 under 35 U.S.C. §112, second paragraph cannot stand.

Rejections Under §§102 & 103 Based On U.S. Pat. No. 4,905,423 to Van Laere

Applicant notes that in the above-referenced final rejection (copy attached in Appendix B), the Examiner referenced Figure 38 of the Van Laere reference and stated that:

Van Laere shows a lock having a first portion 8 associated with the body and a second portion 233 that is associated with the attachment, wherein the first and second portions are engaged to one another to secure the body and attachment together. The lock also has an unlocked condition where the first and second portions are disengaged to permit removal of the attachment from the body. Van Laere shows wherein the lock provides an operator of the power tool with a tool-less means 236 by which the operator may couple the attachment to the body.

The Examiner's comments with respect to the Van Laere reference indicate that the Examiner is interchanging the terms "lock" and "tool-less means" in Claim 1 of the above-referenced application. As Applicant noted above in the section addressing the rejections under 35 U.S.C. §112, second paragraph, the term

"tool-less means" is not employed to invoke the provisions of 35 U.S.C. §112, sixth paragraph, but rather provides an additional description of the function of the lock. Accordingly, Applicant submits that the "lock" element is the critical element of this analysis.

That said, Applicant notes that the Van Laere reference appears to describe two general methods for attaching a tool head to a tool body. The first of these general methods is shown in Figures 34 and 35 and utilizes bolts (e.g., 178, 179) that extend through the attachment and threadably engage the tool body. The second method is illustrated in Figures 38 through 40 and employs a clamp (233) that is coupled to the attachment. A bolt (236) is fitted through the clamp (233) and is tightened to squeeze circumferentially about the tool body after the tool head and tool body have been coupled together.

Applicant notes that a "lock" is commonly understood as being "an entanglement of parts" and respectfully submits that neither the bolts of Figures 34 and 35 of the Van Laere reference nor the clamp of Figures 38 through 40 of the Van Laere reference constitute a lock. In this regard, neither bolts or a clamp that squeezes the exterior of the tool body constitute an entanglement of parts.

It is well settled that "the burden of establishing a *prima facie* case of anticipation resides with the Patent and Trademark Office." *In re Skinner*, 2 USPQ 2d 1788, 1788-89 (B.P.A.I. 1986). If the examination at the initial stage does not produce a *prima facie* case of unpatentability, then without more the applicant is entitled to grant of the patent. *In re Oetiker*, 977 F.2d 1443, 24 USPQ 2d 1443 (Fed. Cir. 1992).

In *W.L. Gore & Associates v. Garlock, Inc.*, the Federal Circuit stated that "anticipation requires the disclosure in a single prior art reference of each element of the claim under consideration." 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), *cert. denied*, 469 U.S. 851 (1984). It is not enough, however, that the reference disclose all the claimed elements in isolation. Rather, as stated by the Federal Circuit, the prior art reference must disclose each element of the claimed invention "*arranged as in the claim*". *Lindermann Maschinenfabrik GmbH v. American Hoist & Derrick Co.*, 730 F.2d 1452, 221 USPQ 481, 485 (Fed. Cir. 1984).

In view of the above, Applicant respectfully submits that the Examiner has not presented a *prima facie* case of anticipation. In this regard, the '423 patent to Van Laere does not teach or suggest each and every limitation of Claims 1 through 4 and 8 through 16. Accordingly, '423 patent to Van Laere is not "a single prior art reference that discloses each element of the claim under consideration" and as such, the Examiner's rejection of Claims 1 through 4 and 8 through 16 under 35 U.S.C. §102(b) cannot stand.

Concerning Claims 18 and 19, which stand rejected under 35 U.S.C. §103(a) as being unpatentable over Van Laere in view of Curtiss and further in view of Applicant's admitted prior art, and Claim 6, which stands rejected under 35 U.S.C. §103(a) as being unpatentable over Van Laere in view of Kress et al., Applicant notes that neither the Curtiss reference, Applicant's admitted prior art or the Kress et al. reference teach or suggest a lock element for coupling an attachment to a tool body. Accordingly, Applicant submits that the combination

of references cited by the Examiner for the rejection of Claims 18, 19 and 6 do not teach or suggest each claim element and that the rejection of Claims 18, 19 and 6 under 35 U.S.C. §103(a) is therefore improper as the Examiner has not presented a *prima facie* case of obviousness.

CONCLUSION

Appellant respectfully submits that the Examiner has not presented a *prima facie* case of indefiniteness, anticipation or obviousness. Accordingly, reversal of the final rejection of Claims 1 through 4, 6, 8 through 16, 18 and 19 is respectfully requested.

Respectfully submitted,



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Date: July 30, 2004

Appendix A: Claims At Issue

1. A power tool comprising:

a body having a motor, and a first output shaft that is operatively coupled to the motor;

an attachment for engagement with the body, wherein the attachment includes an input shaft for operative engagement with the first output shaft of the body when the attachment is engaged with the body, and wherein the attachment includes a further output shaft for transmitting rotational motion derived from rotational motion of the attachment input shaft; and

a lock having a first portion that is associated with the body and a second portion that is associated with the attachment, the lock being operable in a locked condition, wherein the first and second portions are engaged to one another to thereby secure the body and the attachment together, the lock being further operable in an unlocked condition, wherein the first and second portions are disengaged from one another to permit the attachment to be removed from the body;

wherein both the body and the attachment have a respective gear mechanism for causing a change in rotational speed as between the input and the output of the respective gear mechanism, the combination of the body and the attachment thereby providing a power tool with a plurality of serially-coupled gear mechanisms, and wherein the lock provides an operator of the power tool with a tool-less means by which the operator may couple the attachment to the body.

2. A power tool according to Claim 1, wherein the gear mechanism of the body is between the motor and the first output shaft.

Appendix A: Claims At Issue

3. A power tool according to Claim 2, wherein the gear mechanism of the attachment is between the attachment input shaft and the further output shaft.

4. A power tool according to Claim 1, wherein the ratio of input rotational speed to rotational output speed for each respective gear mechanism is fixed.

5. (Canceled)

6. A power tool according to Claim 1, wherein the first output shaft and the attachment input shaft are splined for axial engagement with each other.

7. (Canceled)

8. A power tool according to Claim 1, including a plurality of attachments, each one of which may operatively engage with the body.

9. The power tool according to Claim 1, wherein the gear mechanism of the body is operable to change a rotational ratio from the motor to the output shaft of the body.

10. The power tool according to Claim 1, wherein the gear mechanism of the attachment is operative for changing a rotational ratio from the output shaft of the body to an output of the attachment.

Appendix A: Claims At Issue

11. A power tool comprising:

a body having a motor disposed therein;

an attachment adapted to be selectively fixed to the body;

a first gear arrangement disposed within the body, the first gear arrangement operative for non-adjustably changing a rotational ratio from the motor to an output of the body;

a second gear arrangement disposed within the attachment, the second gear arrangement engaging and driven by the first gear arrangement when the attachment is fixed to the body, the second gear arrangement operative for non-adjustably changing a rotational ratio from the output of the body to an output of the attachment; and

a lock for releasably coupling the body and the attachment, the lock including a first lock portion that is permanently carried by one of the body and the attachment, the lock further including a second lock portion that is permanently associated with the other one of the body and the attachment, the second lock portion being configured to engage the first lock portion in response to a manual input applied from a hand of an operator of the power tool, the manual input being applied directly to the lock.

12. The power tool of Claim 11, wherein the body includes an output shaft driven by the motor, the output shaft being controlled by the first gear arrangement.

13. The power tool of Claim 12, wherein the output shaft is operable to engage an input shaft disposed within the attachment.

14. The power tool of Claim 13, wherein the input shaft is controlled by the second gear arrangement.

Appendix A: Claims At Issue

15. The power tool of Claim 11, wherein the first gear arrangement and the second gear arrangement cooperate to mediate the rotational speed of the power tool.

16. The power tool of Claim 11, wherein the first gear arrangement is disposed between the motor and the attachment.

17. (Canceled)

18. The power tool of Claim 1, wherein the gear mechanism of at least one of the body and the attachment is an epicyclic gear mechanism.

19. The power tool of Claim 11, wherein at least one of the first and second gear arrangements is an epicyclic gearset.

DETAILED ACTION

1. This action is in response to applicant's amendment, Paper No. 14, received on 12/17/2003.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-4, 6-10, 11-16, 18, 19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 requires a "tool-less means" by which the operator may couple the attachment. It is unclear what is encompassed by tool-less and what the scope of the claim is.

Claim 11 recites the limitation "the other one" in line 14 of the claim. There is insufficient antecedent basis for this limitation in the claim. It is unclear what is being referred to.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless —

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-4 and 7-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Van Laere (4,905,423).

With respect to claim 1, Van Laere discloses the invention substantially as claimed including a power tool comprising a body having a motor, and a first output shaft 5 operatively coupled to the motor and an attachment for engagement with the body seen in Figure 38, wherein the attachment includes an input shaft 175 for operative engagement with the first output shaft 5 of the body when the attachment is engaged with the body, and wherein the attachment includes a further output shaft 222 for transmitting rotational motion derived from rotational motion of the attachment input shaft 175.

Furthermore, Van Laere shows a lock having a first portion 8 associated with the body and a second portion 233 that is associated with the attachment, wherein the first and second portions are engaged to one another to secure the body and attachment together. The lock also has an unlocked condition where the first and second portions are disengaged to permit removal of the attachment from the body. Van Laere shows wherein the lock provides an operator of the power tool with a tool-less means 236 by which the operator may couple the attachment to the body.

Van Laere also shows the power tool characterized by both the body and the attachment having a respective gear mechanism 13, 216, 220 for causing a change in rotation speed as between the input and the output of the respective gear mechanism, the combination of the body the attachment thereby providing a power tool with a plurality of serially coupled gear mechanisms as described in column 20, lines 35-50 and column 36, lines 55-68.

With respect to claim 2, Van Laere shows the gear mechanism 13 of the body is between the motor and the first output shaft 5.

With respect to claim 3, Van Laere shows the gear mechanism of the attachment is between the attachment input shaft and the further output shaft as seen in Figure 38.

With respect to claim 4, Van Laere shows the ratio of the input rotational speed to output rotational speed for each respective gear mechanism is fixed.

With respect to claim 7, Van Laere shows the attachment is releasably engageable with the body as in Figure 38, 39.

With respect to claim 8, Van Laere shows a tool including a plurality of attachments, each one of which may operatively engage with the body .

With respect to claim 9, Van Laere shows the gear mechanism of the body is operable to change a rotational ratio from the motor to the output shaft of the body .

With respect to claim 10, Van Laere shows the gear mechanism of the attachment is operative for changing a rotational ratio from the output shaft of the body to an output of the attachment.

With respect to claim 11, Van Laere discloses the invention substantially as claimed including a power tool comprising a body having a motor disposed therein, an attachment adapted to be selectively fixed to the body, a first gear arrangement 13 disposed within the body, the first gear arrangement operative for non-adjustably changing a rotational ratio from the motor to an output of the body and a second gear arrangement 216,220 disposed within the attachment.

Van Laere shows a lock 233,236 for coupling the body and attachment, including a first lock portion 8 that is permanently carried by one of the body and the attachment. The lock further includes a second lock portion 233 that is permanently associated with the attachment. The second lock portion is configured to engage the first lock portion in response to a manual input applied from a hand of an operator of the power tool, manual input being applied directly to the lock.

Van Laere shows the second gear arrangement engaging and driven by the first gear arrangement when the attachment is fixed to the body, the second gear arrangement operative for non-adjustably changing a rotational ratio from the output of the body to an output of the attachment as seen in Figure 38 and 1.

With respect to claim 12, Van Laere teaches wherein the body includes an output shaft 5 driven by the motor, the output shaft being controlled by the first gear arrangement 13.

With respect to claim 13, Van Laere teaches wherein the output shaft is operable to engage an input shaft disposed within the attachment.

With respect to claim 14, Van Laere teaches wherein the input shaft is controlled by the second gear arrangement.

With respect to claim 15, Van Laere teaches wherein the first gear arrangement and the second gear arrangement cooperate to mediate the rotational speed of the power tool.

With respect to claim 16, Van Laere teaches wherein the first gear arrangement is disposed between the motor and the attachment.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Van Laere (4,905,423) in view of Curtiss (4,274,304) and further view of applicant's admitted prior art.

Van Laere discloses the invention substantially as claimed but does not explicitly show an epicyclic gearbox for each gearing mechanism.

However, Curtiss teaches the use of an epicyclic gear box with a motor and tool attachment arrangement as in column 2, lines 18-45 for the purpose of compact lightweight design as in column 2, lines 45-60.

Therefore, it would have been obvious to one having ordinary skill in the art to provide Van Laere with an epicyclic gear box in order for compact and lightweight design as is commonly practiced in the art.

Furthermore, this modification is further obviated by applicant's statement on page 57 lines 7-11, that those skilled in the art would recognize the use of an epicyclic gear reduction mechanism is standard practice, therefore, the epicyclic gear reduction mechanism is not described in detail in the specification.

8. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Van Laere (4,905,423) in view of Kress et al. (4,103,511).

Van Laere discloses the invention substantially as claimed including the above but does not explicitly show wherein the first output shaft and the attachment input shaft are splined for axial engagement with each other.

However, Kress et al. teaches a tool wherein the first output shaft and the attachment input shaft are splined for axial engagement with each other as seen in Figure 1 and 2 for the purpose of centering the corresponding attachment as described in column 4, lines 40-55.

Therefore, it would have been obvious to one having ordinary skill in the art to provide a splined connection to Van Laere in order to achieve improved centering.

Conclusion

9. Applicant's remarks have been fully considered but are deemed non-persuasive.

Applicant contends that the prior art does not show "tool tool-less" locking. To the extent that "tool tool-less" locking is definite, examiner contends that the locking device of Van Laere can be described as tool-less if a user were to tighten the bolt 236 by hand. Claim 11 requires a "manual input"; however, claims are given their broadest reasonable interpretation and a user with or without a tool can be described as a manual input.

For the above reasons, the grounds of rejection are deemed proper.

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Louis B Tran whose telephone number is 703-305-0611. The examiner can normally be reached on 8AM-6PM Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rinaldi I Rada can be reached on 703-308-2187. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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